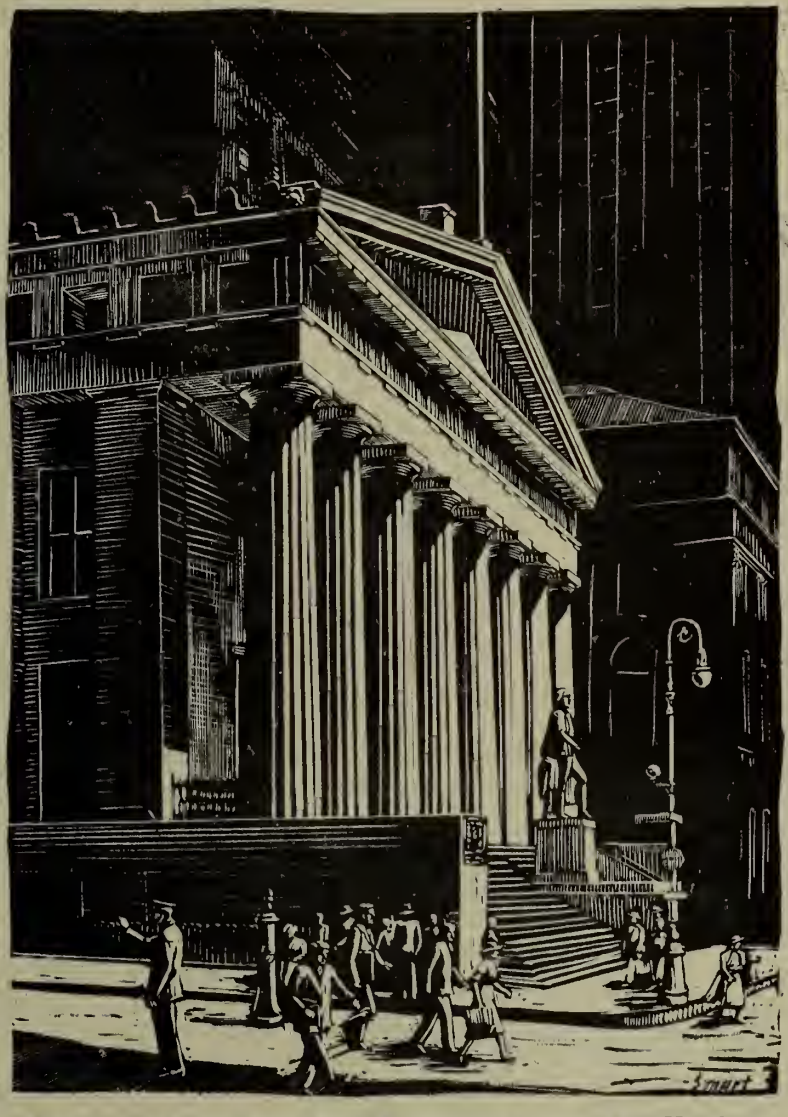
THE REGIONAL REVIEW



Federal Hall National Historic Site --- New York

NATIONAL PARK SERVICE

REGION ONE

RICHMOND VIRGINIA

OCTOBER - NOVEMBER 1939 VOL. III - NOS. 4 & 5

THE COVER

The old subtreasury building at Wall and Broad Streets in New York City, shown on the cover by Samuel O. Smart, was set aside last April as a National Historic Site. The present structure, itself more than a century old, occupies the site of Federal Hall which served for five years as a meeting place for Congress. George Washington, in 1789, took the oath there as first President, and the balcony slab on which he stood during the inauguration is preserved in the present building. Much of the original foundation, laid in 1699, remains intact today.

THE REGIONAL REVIEW

VOLUME III **NUMBERS 4 & 5**

M.R.TILLOTSON
REGIONAL DIRECTOR

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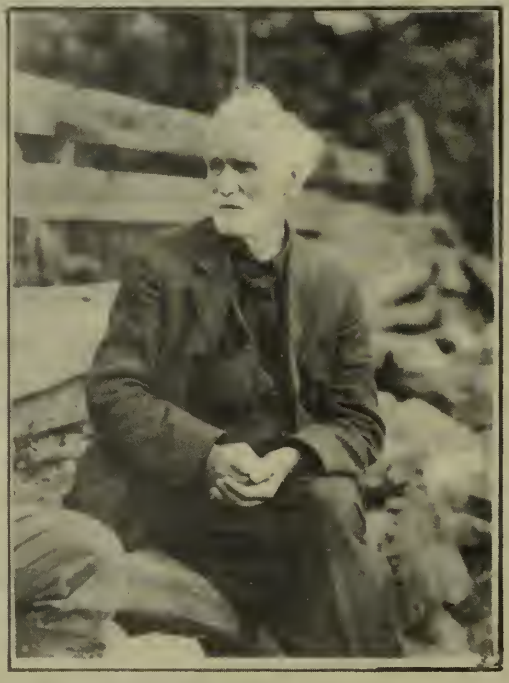
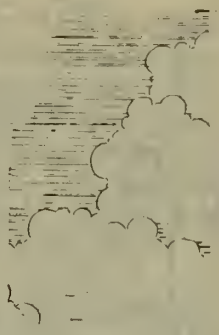
THIS MONTH

THE UNITED STATES
DEPARTMENT OF THE INTERIOR
· NATIONAL PARK SERVICE ·
REGION ONE ~ RICHMOND , VIRGINIA

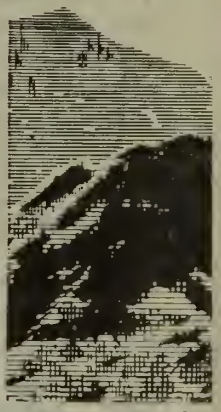


The upper photograph shows Steve Woody, 86, describing a bear hunt while CCC Enrollee Moore operates the controls of a recorder. At the lower left is Aden Carver, 93, who told of his escape from a panther. Mack Hannah (right), 81, was a third subject interviewed in a linguistic survey of Great Smoky Mountains National Park and adjacent areas.

RECORDING *Speech* in the Great Smokies



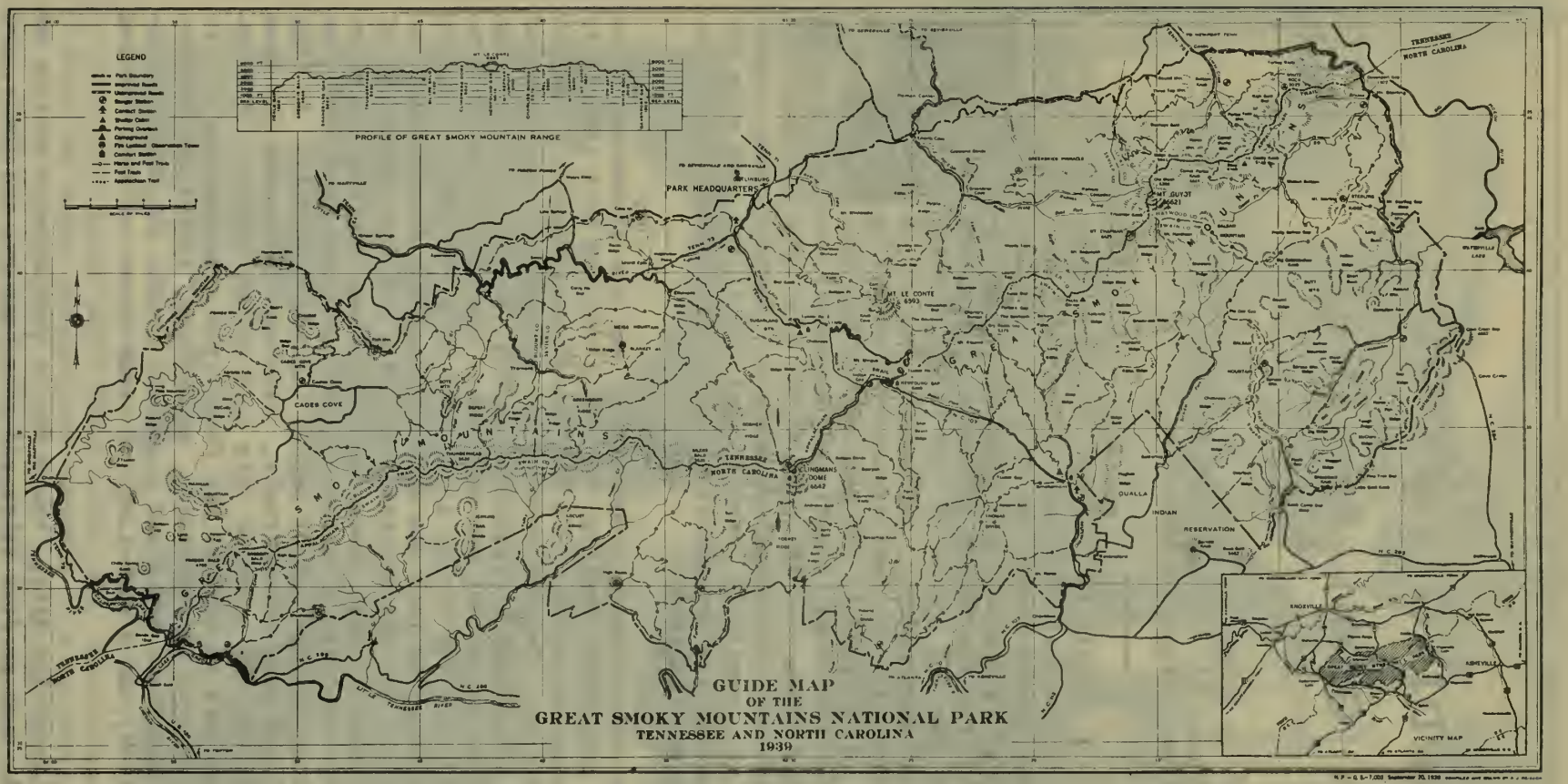
By Joseph S. Hall,
Technical Collaborator,
Fellow, Columbia University



The writer made a linguistic survey of Great Smoky Mountains National Park and its environs during the summer of 1937 as a student technician of the National Park Service. The subjects of the study were primarily those native inhabitants who, for one reason or another, have been allowed to remain within the bounds of the Park. In most cases the residents were elderly couples who expect to stay in their old homes for the rest of their lives and to whom yearly leases are granted by the Service. Other subjects were selected from areas immediately adjacent, especially those near areas of the park which have been abandoned completely by the original population. In many cases, speakers and informants who previously lived in what now is the park were interviewed. Altogether, a representative linguistic picture of the entire Smokies region was obtained.

Owing to the mountaineer's sensitivity and his apprehension of criticism, it was not found feasible to tell a subject that linguistic information was being collected. It was therefore necessary to gather data by indirect methods. Careful observation was made of the speech of hillsmen in their conversation together and in the writer's meetings with them on the road, in stores, and the like. The bulk of the information, however, was received during interviews in their homes. In such contacts it was necessary to tell the speakers that the Service was interested in gathering up old stories, accounts of the settlement of creeks and coves, tales of bear hunts, liquor making, and similar materials. In the large majority of cases it was possible to divert the subject with questions and get him or her to talking naturally. At such times linguistic notes were taken freely, although the reason for them ostensibly was to record the story or tale told by the speaker. The results of this method were successful and four field notebooks were filled with data pertaining to pronunciation, morphology, syntax and vocabulary. All of the important vowel and consonant sounds and their variations were transcribed, and a word-list of some three or four hundred items was compiled.

Besides the linguistic data, there was a considerable residue of by-product material, such as folk tales and folk history, and these have been assembled in a separate report. In view of the complex nature of Great Smokies speech sounds, however, it was felt that the effectiveness



When the present acquisition program has been completed, Great Smoky Mountains National Park will comprise an area of approximately 685 square miles astride the North Carolina-Tennessee boundary. It embraces the greatest mountain mass east of the Black Hills of South Dakota and 16 of its peaks exceed 6,000 feet. The Clingsman Dome road reaches an altitude of 6,311 feet, the loftiest highway in the East. The largest forest of red spruce and unspoiled hardwoods of the United States is found in the park and more than 1,000 plant species have been listed. The watersheds include 600 miles of fine trout-supporting streams. There are 56.5 miles of high standard roads, 25 miles of secondary roads and 510 miles of horse and foot trails. The park was authorized in 1926 but has not been dedicated.

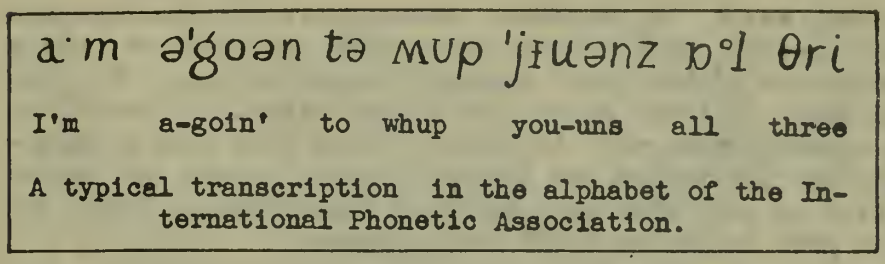
of the phonetics study would be increased immeasurably by phonographic records of natural speech. Such records would make possible not only a more accurate description of the Great Smokies dialect but also the preservation of specimens of local speech for future times. It therefore was thought to be urgently desirable to return to the area with a phonographic recorder before publishing the data collected. Since the entire linguistic study will be published as a doctoral dissertation, great regard necessarily is paid to accuracy and thoroughness.

Last June a resumption of the study was made possible by a fellowship awarded to the writer by Columbia University. The National Park Service endorsed continuance of the project by naming him technical collaborator and offering generous cooperation in every way. The Service provided a Presto recorder, discs, a pickup truck for transportation of equipment, and office space in which to do the writing. Besides the Presto recorder (use of which is limited to CCC camps and neighboring towns where alternating electric current is available, or where direct current may be converted to AC), the investigator equipped himself with a Garwick recorder, which operates from a 6-volt, 200 ampere-hour battery. The latter machine has seen two years of service in Africa but, after thorough reconditioning, it continues to make good records. It may be taken up rough roads to remote mountain homes where it is set up on the pickup truck or on the porches of dwellings. The Presto machine cuts acetate discs, the Garwick aluminum. It will be interesting to know which type of record is the more durable. Authorities feel at present that acetate provides more accurate reproduction, but that aluminum is more lasting.

Two methods are employed to elicit speech material for recording. One is to ask the speaker to read the story of Arthur the Rat. This little tale contains all the important sounds of English and may be used for ready reference when one desires to know how a particular speaker pronounces a given word. Use of the story also is helpful when comparisons of the speech of two or more parts of the country are made[1]. The other and principal method is to have a subject tell a story or event from his life experience. It is thought that a more natural utterance is evoked in this way. The results are surprisingly good, and cases of microphone fright have been far less frequent than anticipated. Men relate enthusiastically the stories of bear hunts in which they have participated and at times forget themselves so completely as to become dramatic. Women generally are more reluctant to talk into the microphone

(1) The story: Once there was a young rat named Arthur who never could make up his mind. Whenever his friends asked him if he would like to go out with them, he would only answer, "I don't know;" he wouldn't say yes or no either. He would always shirk making a choice. His Aunt Helen said to him, "Now look here! No one is going to care for you if you carry on like this. You have no more mind than a blade of grass."

One rainy day the rats heard a great noise in the loft. The pine rafters were all rotten, so that the barn was rather unsafe. At last the joists gave way and fell to the ground. The walls shook, and all the rats' hair stood on end with fear and horror. "This won't do," said the captain; "I'll send out scouts to search for a new home." Within five hours the ten scouts came back and said, "We found a stone house where there is room for us all. There is a kindly horse named Nelly, a cow, a calf, and a garden with an elm tree." The rats crawled out of their little houses and stood on the floor in a long line. Just then the old rat saw Arthur. "Stop," he ordered coarsely. "You are coming, of course." "I'm not certain," said Arthur, undauntod. "The roof may not come down yet." "Well," said the old rat, "we can't wait for you to join us. Right about face! March!" Arthur stood and watched them hurry away. "I think I'll go tomorrow," he said calmly to himself, "but then again I don't know; it's so nice and snug here." That night there was a big crash. In the foggy morning some men with some boys and girls rode up and looked at the barn. One of them moved a board and saw a rat quite dead, half in and half out of his hole.



A typical transcription in the alphabet of the International Phonetic Association.

but, with a little urging, tell of old times, memorable experiences, and bygone methods of weaving and cooking. One elderly woman of the Oconaluftee area declined the microphone, however, and informed the investigators: "I don't fancy no sich as that and I won't jine up with ye!" Two men in a remote section near the park thought they were about to broadcast over the radio when the recorder was placed before them.

Many of the records should be historically valuable some day for the contemporary culture which they preserve. The chief disadvantage lies in the fact that it is necessary to transcribe all the material on the record for reference. Moreover, a subject may continue his account for two or three record surfaces without pronouncing all the sounds required for a good phonetic transcription of his speech. On the other hand, what is lost in this respect is more than compensated by the natural idiom which he employs and the consequent opportunity for the investigator to discover linguistic archaisms and colorful expressions.

All the speech material on the records will be transcribed eventually in the alphabet of the International Phonetic Association (with modifications for American English as advised by the editors of American Speech and the Linguistic Atlas of the United States and Canada.)

Because it was found possible in the previous survey to combine the collection of data on both speech and folklore, the writer continues to look for folklore material. Recordings of a number of old English ballads and traditional American pieces have been made. Among the former are Barbara Allen, Pretty Polly, William Hall, Jack the Sailor, The Butcher's Boy, and Pretty Saro; among the latter are Come All You Texas Rangers and Cindy. The musical field will not be covered thoroughly, of course, but at least there will be specimens recorded while it still is possible to preserve them. Two recordings made at an outdoor square dance at Bryson City, North Carolina, are notable for their dance calls and the reflection of the crowd's enthusiasm.

Careful observation is taken of local plant and animal names, of old remedies for ailments, and of customs, superstitions and the like. Most of this material never will be captured by the phonographic disc; but in some cases it may be possible to induce a woman to tell her favorite home remedies or her superstitious beliefs into the microphone. Stories of events which, as a result of exaggeration and imaginative embellishment, have passed into the folklore stage, should be obtained easily.

It is contemplated that duplicates of all the outstanding records will be made, one set to go to Columbia University and the other to the Service. Because camp fire entertainment constitutes a feature of the

Service program, it is conceivable that the best records of speech and music may be used ultimately for the diversion and enlightenment of park visitors. Such records would combine well with motion pictures portraying the scenery and culture of the Great Smokies. This use of the discs, however, would require pressings of the commercial type, for a number of copies of the same recording would be needed and the originals should be saved.

A Mountain Home in the Smokies

One question which it is hoped the phonographic survey may aid in solving is whether mountain speech represents a survival of Elizabethan English, as some romantic writers have claimed. One cannot deny that fourteenth, fifteenth and sixteenth century forms persist in the Great Smokies. Ax for ask occurs in Chaucer and in the Wycliffe, Tindale and Coverdale Bibles. Fotch for fetch is found in the fourteenth century Cursor Mundi and in the fifteenth century Townely Mysteries. The expression, to spend one's opinion, heard in the sentence, "I'd rather not spend my opinion," was used by Shakespeare in Othello. Use for to dwell or to inhabit, which appears in one of the phonograph records in the sentence, "We located a big bear and found where he was a-usin'," was employed by Beaumont and Fletcher. Spenser and the people of the Great Smokies agree in the pronunciation swinge for singe.

Yet most of the Elizabethan forms which survive in the Southern Appalachians continued in standard use into the seventeenth, eighteenth and (sometimes) the nineteenth centuries. Afeared occurs more than 30 times in Shakespeare, but it was also the prevailing form throughout the seventeenth century and thus cannot be said to be exclusively Elizabethan. Ballet for ballad was the common sixteenth century pronunciation (although Shakespeare has ballad), but it flourished also in the seventeenth century, being used by Pepys among others. Examples of not to care to for not to mind, as in a sentence spoken by an Emerts Cove man, "She don't care to talk," meaning, "She doesn't mind talking," are found in both the sixteenth and seventeenth centuries. (It is interesting to note in the English Dialect Dictionary that this sense of the phrase survives dialectally in Scotland.)

Furthermore, the historical evidence does not favor the supposition that Southern Appalachian speech is an off-shoot of Elizabethan English. The region in question was peopled largely by emigrations from England,

Scotland, and northern Ireland during the eighteenth century. It may be expected therefore that the area should contain numerous seventeenth and eighteenth century expressions, and such is the case. The pronunciation cowcumber for cucumber, now obsolescent in the Great Smokies, was prevalent in England in the seventeenth century and in the beginning of the eighteenth. Catched, the past tense of catch, was current, besides caught, from the thirteenth century to the middle of the eighteenth and was used by Shakespeare, Milton, Bunyan and Pope. Funk, "a disagreeable odor," is rather definitely a seventeenth and early eighteenth century word, as an examination of the New English Dictionary will show. So also chigger, an insect which burrows beneath the skin, is a development from a Spanish loan-word chigre, apparently introduced into English toward the end of the seventeenth century.

Mention may be made of a quaint and picturesque use of the word shine, heard in the summer of 1937. An old hunter in Wears Valley said: "In just a thought or two the painter /panther/ come out and screamed. Hit wouldn't come up within shine of the fire." Compare Milton's "Now sits girt with taper's holy shine," and Pope's "Fair opening to some court's propitious shine." Spenser employs sorry in the sense of melancholy or dismal, but the Miltonic sense of vile or worthless is reflected in the statement of a resident of Cataloochee, who was chafing under the restrictions imposed by the park: "The wust, sorriest things they is, like bob-cats, you caint kill!"

Examples could be extended, but these perhaps suffice to show that Great Smokies speech is not Elizabethan English transplanted to America. Yet it possesses a rugged, colorful and imaginative character, a pleasant archaic flavor, and deserves to be recorded for the benefit of future students of American civilization.

SOME GREAT SMOKYISMS

It began to come down dusky; the sun was a-settin'.
We ought to do plenty of fishing against the season closes.
It's not generated in me to steal.
Hit'll kill ye or cure ye, one.
I didn't want to be catched in the rain and no shelter.
Dad gone it, there weren't even a sprig of fire in his place!
Hit was thick of houses, thick of people up thar then.
I had a good barn until come a wind storm and blowed it down.
I would rather surround (avoid) a snake than kill it.
I let drive (shot) at him. The bear broke to run and ran yan way up the mountain.
The day before the hunt we usually go and find where the bears are usin'. There's a heap more hard work and slavish runnin' and trampin' in bear huntin' than in 'coon huntin'.

KENNESAW MOUNTAIN and the ATLANTA CAMPAIGN

Little Kennesaw, the Saddle and Big Kennesaw,
as Seen from the Site of General Johnston's
Headquarters

By Bowling C. Yates, Jr.,
Superintendent,
Kennesaw Mountain National Battlefield Park, Georgia.

"Kenesaw, the bold and striking twin mountain, lay before us, with a high range of chestnut hills trending off to the northeast, terminating to our view in another peak called Brush Mountain. To our right was a smaller hill, called Pine Mountain, and beyond it in the distance, Lost Mountain. All these, though linked in a continuous chain, present a sharp conical appearance, prominent in the vast landscape that presents itself from any of the hills that abound in that region. Kenesaw, Pine Mountain, and Lost Mountain form a triangle. Pine Mountain, the apex, and Kenesaw and Lost Mountain the base, covering perfectly the town of Marietta, and the railroad back of the Chattahoochee. On each of these peaks the enemy had his signal station, the summits were crowned with batteries, and the spurs were alive with men busy in felling trees, digging pits, and preparing for the grand struggle impending. The scene was enchanting; too beautiful to be disturbed by the harsh clamor of war; but the Chattahoochee lay beyond, and I had to reach it."

With these words General William T. Sherman gives a brief but fitting description of Kennesaw Mountain battlefield near Marietta, Georgia. Today the spurs are not alive with preparations for a grand struggle as when Sherman saw them, but the natural beauty and strength of the terrain are sufficient to attract the interest of the many travelers of U. S. Highway No. 41 between Chattanooga and Atlanta.

Sherman was not the only Federal soldier to be impressed by this

SPELLING IT

Kennesaw is today the officially accepted orthography. The nearby town of Kennesaw (the "Big Shanty" of war days) and the name of a residential street in Marietta both demonstrate the local preference for the double "n". A well known survival of the form often found on maps of the Sixties is the spelling employed by "Czar" Kenesaw Mountain Landis (born in Ohio two years after the Georgia battle), a former United States district judge who, since 1920, has been commissioner for the major baseball organizations of America.

battlefield. During the engagement a direct frontal assault was made on a part of the Confederate line defended by General Cheatham. Here Federal losses were heavy and among them was a brigade commander, Colonel Dan McCook, a dashing young officer, personal friend of Sherman, and a member of the famous McCook family of Ohio. His father and eight brothers served in the Federal army, five of his brothers being generals.

Members of Dan McCook's brigade, impelled by the desire to honor the memory of their fallen leader and comrades, formed the Colonel Dan McCook Memorial Association. This group of Federal soldiers, so far as is known to the writer, by acquiring the land over which they fought on Kennesaw battlefield, was the first and only organization of Civil War soldiers to become directly responsible for the establishment of a national battlefield park. On December 26, 1899, representatives of the association acquired title to the area where the brigade had fought, and dedicated it for "commemorating the heroism of that brigade, its associates and opposing troops of the battlefield at Cheetham's Hill near Kennesaw Mountain, Georgia."

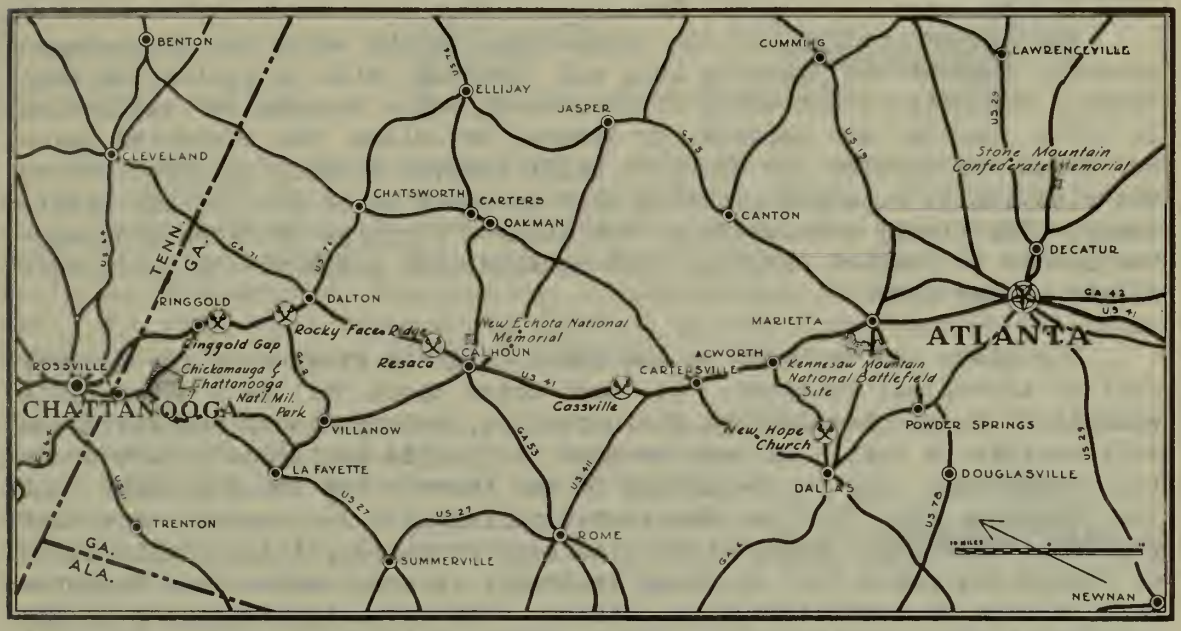
On February 8, 1917, Congress authorized the establishment of Kennesaw Mountain National Battlefield Site. The act specified the inclusion of the 60-acre tract which had been acquired and developed by the Colonel Dan McCook Memorial Association. It was not until 1928 that the association transferred the property to the United States, so that a portion of the battlefield had been acquired, dedicated and partly developed as a Civil War historic site over a period of 28 years before the Federal government initiated the establishment of a national battlefield park. This area was placed under supervision of the War Department and was transferred in 1933 to the National Park Service. Malcolm C. Tarver, Congressman for the Seventh Georgia District, sponsored legislation in 1935 for considerable acquisition and development of the lands, pursuant to which 2,000 acres have been obtained, including the most historic portions of the battlefield.

The Atlanta Campaign was an integral part of the Federal military strategy for 1864. Grant was to resume the drive on Richmond. Sherman, commanding Federal forces at Chattanooga, was to keep the Confederate army in the west so busy that it could not reinforce Lee and, as well, he was to destroy all factories, communications and supplies which might prove of aid to the Confederacy.

On May 4 Sherman, with 100,000 troops, moved south toward Dalton where Johnston had assumed a defensive position with 50,000 Confeder-

ates. During this campaign Johnston, ever on the defensive, offered battle only when he had a definite advantage of terrain. Unwilling to make frontal assaults under such conditions, Sherman employed flanking tactics to force the Confederates out of position so that he might strike them in motion. So skillfully were both armies maneuvered that neither general could find a flaw in his opponent's armor, but the weight of numbers forced the Confederates deeper and deeper into their own territory with the result that by June 6 they were entrenched in the vicinity of Kennesaw Mountain, one hundred miles south of Chattanooga.

The battle of Kennesaw Mountain began June 6 and was ended by the Confederate withdrawal on the night of July 2. The Confederates retired



from one defensive position to another during the engagement so that the battle was fought over an area of approximately 144 square miles. It is the final Confederate position held from June 19 to July 2, where the most critical engagements occurred, that has been selected for development by the Service.

During the engagement, the opposing armies employed every type of tactics used during the Atlanta Campaign: flanking operations, direct frontal assaults, cavalry raids, and approach to fortified lines by successive entrenchments. For that reason the battlefield serves remarkably well for interpretation of tactics employed throughout the critical campaign.

The interpretive program for the area is based on a museum supplemented by field exhibits. The theme of the museum will be the story of the battle of Kennesaw Mountain as related to the Atlanta Campaign and Sherman's other campaigns in the west. This theme naturally will develop Sherman's successful treatment of his problem of logistics, the difficulty of maneuvering large bodies of troops over wooded and hilly ter-

rain, and an exposition of the tactics adopted by Sherman and Johnston in the campaign.

The museum story will discuss not only the military phases of the Atlanta Campaign; it likewise will emphasize other far-reaching results of those operations. Sherman's capture of Atlanta disrupted the communication and manufacturing system of the Confederacy to such a large extent as to deprive the southern armies of supplies which were indispensable. The fall of the city indicated to the civilian population of the Confederacy that its armies were unable to defend their own territory. The Confederacy had high hopes of foreign recognition and intervention, but these were dashed completely by the successful conclusion of the Atlanta Campaign.

The larger portion of the population in the north was discouraged because the war was proving long and tedious with no indication that Federal victories could bring it soon to an end. Running for reelection in 1864, Lincoln was opposed by General McClellan who advocated peace. McClellan was popular and unless a major Federal victory occurred before the election it appeared probable that he would be chosen for the Presidency. The timely conclusion of the Atlanta Campaign provided the impetus needed to reelect Lincoln, and spurred the north to the successful climax of the war.

The story to be told in the field will be given at a few natural foci of historical interest. At each point there will be a trailside exhibit of maps, photographs, and narrative, and from each exhibit there will radiate a trail system designed to provide an intimate picture of the operations. Due to the nature of the terrain and the foresight of the engineers who laid out the fortifications for the armies, excellent panoramic views will be obtainable at each of these points. Restoration of fields and woods will be found desirable in areas where such features were factors of considerable importance. The fortifications used in the engagement were constructed mostly on ridges which were rocky and wooded providing good visibility and protection for the combatants. Because of the character of the soil, little attempt has been made to cultivate these areas and the works are well preserved today, presenting an appearance of grim utility combined with age.

Sherman marched from Chattanooga May 4 and entered Atlanta September 2. The bivouacs and battlefields from May 19 to September 2 are visible from the crest of Big Kennesaw Mountain so that from that point a broad picture of a major portion of the Atlanta Campaign can be given readily to visitors by employing the terrain itself as a hugh relief. It is planned to construct observation facilities and interpretive exhibits in order that this panoramic sweep may be utilized to the utmost.

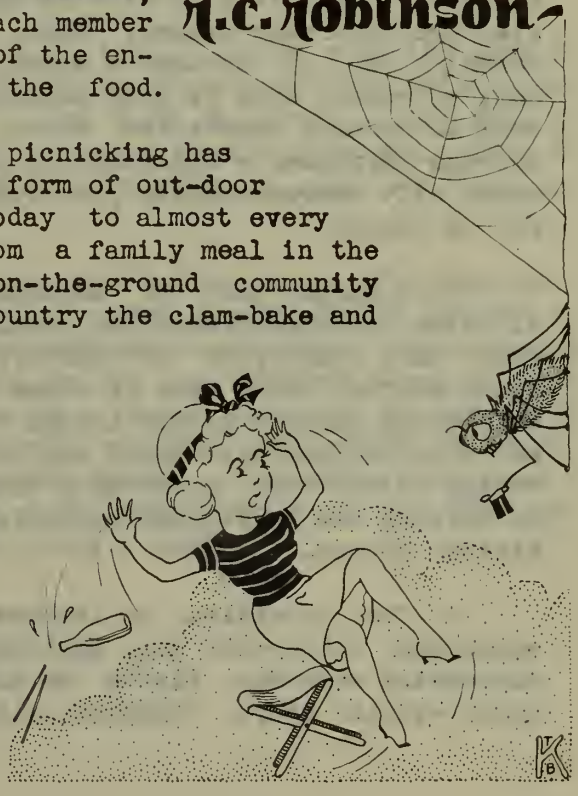
The acquisition and development of Kennesaw battlefield and the interpretation of this battle of the Atlanta Campaign, together with the development of the Atlanta Campaign Markers at Ringgold, Dalton, Resaca, Cassville and New Hope Church, will bring into proper light the thrust in the west which did much to restore the nation to unity by hastening the end of the Southern Confederacy.

Picnicking is an ancient form of recreation. Greek men of letters often gathered for an outing in the parks and gardens of that day, each contributing his share of the food for a communal meal and each participating in the program. Being intellectuals, they emphasized such pursuits as philosophical discussions, declamations, drama, music and the arts, but they also engaged in physical sports since they prided themselves on being well rounded individuals --- scholars and athletes.

Early in the nineteenth century a fashionable group of Londoners organized a Picnic Society. The purpose was to provide members with social entertainment of various kinds, including outings, musicals, dramatic programs, and contests. Each member was required to furnish his share of the entertainment as well as his share of the food.

—by
M.C. Robinson

From such patrician beginnings, picnicking has become the common man's most popular form of out-door recreation. The term is applied today to almost every type of out-door pleasure party from a family meal in the back yard to a big all-day-dinner-on-the-ground community gathering. In one section of the country the clam-bake and fish-fry hold the fort of popularity; in another section it is barbecued pig, chicken or calf. Everywhere the family basket picnic is a favorite out-door recreation. Everywhere both informal and organized groups go forth to parks and wooded countryside for a meal and a frolic in the out-of-doors. Ask a hundred persons almost anywhere in the country to name their chosen form of out-of-door recreation and a sizable percentage will name picnicking.



Question them and it will be learned that the word "picnic" means far more to most of them than eating a meal in the out-of-doors. To some it includes hiking, climbing, exploring; to others it features a swim in a lake or stream; and to still others it is the gateway to sports and games, to the indulgence of such hobbies as photography, sketching and the study of nature. And there are, of course, those who think of picnicking as simply a chance to get away from home for relaxation in a cool, shady spot surrounded by the peace and beauty of nature.

People generally seek recreation in groups. This is particularly true of picnickers. Both young and old, they go to a recreational area as members of a family, as an informal group or as an organization. But recreational interests vary widely within the same group. Planning for picnicking on outlying parks should give full consideration therefore to this range in group interests. Some of the points which require consideration include:

1. The provision of ample play space. From one-fourth to one-half the total area given over to picnicking well might be devoted to open space for active sports and games, and to facilitate better circulation. Open space also makes the landscape more pleasing by providing breaks in the monotony of thick woods. This space should be distributed to provide at least one large playfield situated centrally, and numerous small play areas convenient to groups of tables and fireplaces.

2. Facilities should be provided for both the informal family group and the organized group. The organized group frequently has a planned program and needs the exclusive use of such facilities as shelters, council fire circles and playfields. The organized group also prefers more privacy than is necessary for the family or informal group. It should be noted, however, that overcrowding of any sort of picnic area is poor planning. Not only does such a practice tend to destroy vegetative cover, but it also detracts from the average picnicker's enjoyment by creating a congested condition from which city recreationists particularly need to escape when they go for an outing.

3. A large part of an area's picnicking facilities should be situated as conveniently as possible to the bathing beach. Studies show that a majority of visitors want to participate in water and beach sports, while many of those who go to the park primarily for a swim bring along a picnic lunch. Such an arrangement, if supplemented by ample playfield space and hiking trails leading away to interesting objectives, provides a range of activities sufficiently wide to satisfy the individual variation in interests found in most picnicking groups.

4. The provision of lighted shelters and campfire circles to encourage after-dark use, particularly by groups, offers a means of increasing week-day visits by extending the picnic outing into the early evening hours. Darkness cloaks nature with a thrilling, mys-

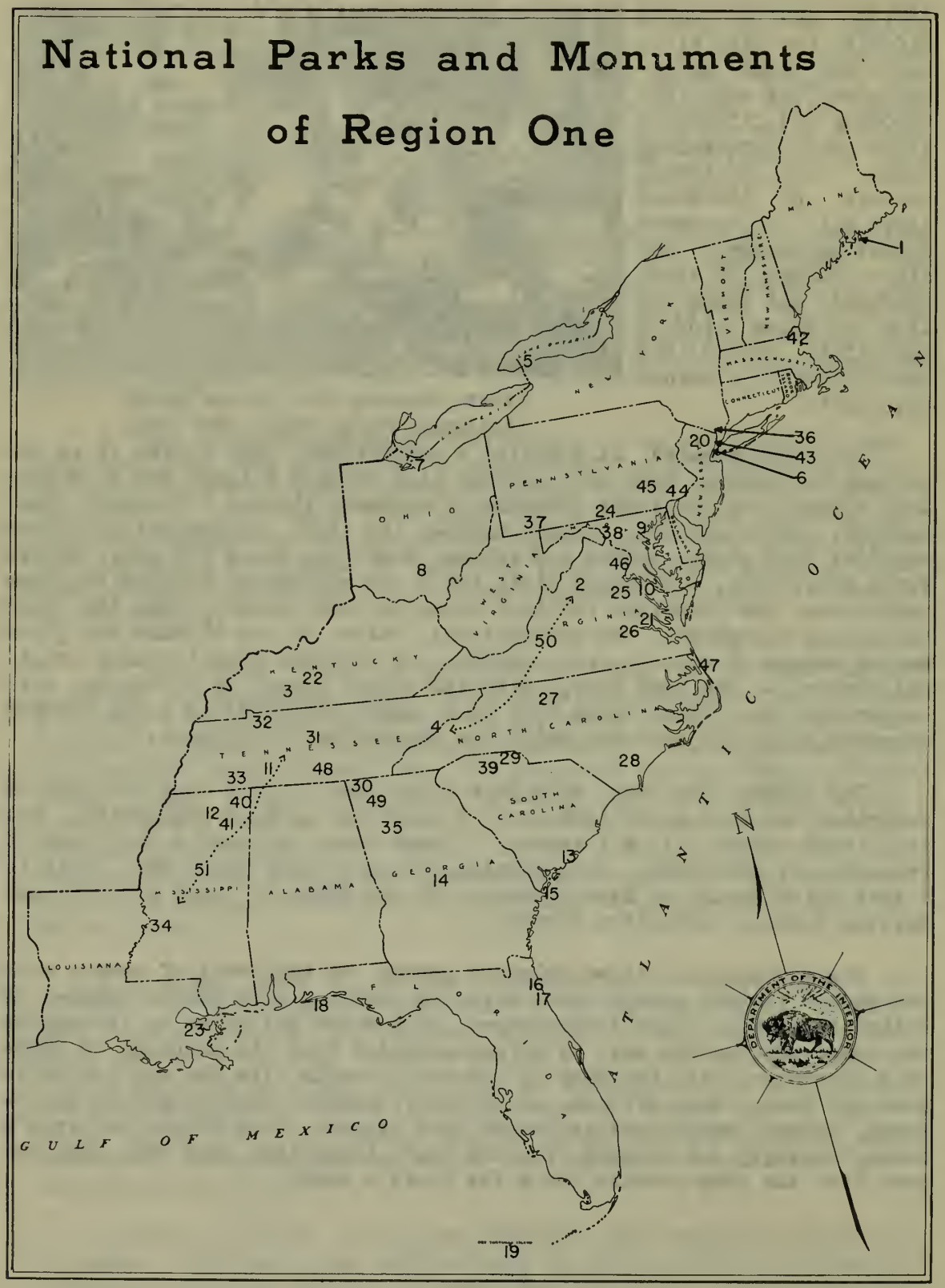
terious quality which affords the park visitor a new kind of experience. The camp fire throwing its flickering light on surrounding trees, the enclosing curtain of blackness alive with a thousand pulsating sounds, the close intimacy of stars overhead, all these combine to bring about a convivial atmosphere which affords a unique enjoyment.

Riders Pausing for Picnic Lunch,
Allegany State Park, New York

For those engaged in planning a recreational area system it is important to remember that many persons like to pack a lunch and go motoring, either for the sheer pleasure of movement through a pleasant countryside, or to explore a place unknown to them. Conveniently located waysides with picnic stoves and tables, some open space for play, trails for a short hike, a pleasing vista for a few minutes of relaxation, these constitute the principal facility needs of such groups. Some day, when the nation recognizes the recreational value of its streams and quits making sewers of them --- and protects and restores them to their original beauty --- the boat trip, with its picnic lunch as a feature, will become popular. Then there will be a need for waysides along streams wherever spots can be found which are accessible to highways.

The picnic has been with us a long time. It now tops the list of favorite out-door activities and is likely to grow in popularity. But to a large extent it is a symbol, a name used to cover a multitude of recreational interests. Like camping, it is a means to an end. This is a fact which should be kept uppermost in the minds of those who plan and develop outdoor recreation systems.

Areas other than those selected purely on the basis of scenic values should contain enough level space to permit a more varied program of activities. Open lands interspersed with woods add value by increasing the range of possible use, by offering relief from the monotony of trees which leave no place for play in the sun. People like the sun and it is good for them. Many of them spend their working days cooped up in offices, stores, warehouses and other dark places. They should be given a chance to enjoy and benefit from the sun's benevolent rays when they escape into the open country for a few hours a week.


National Parks and Monuments
of Region One
MAINE
VERMONT
NEW HAMPSHIRE
NEW YORK
MASSACHUSETTS
CONNECTICUT
PENNSYLVANIA
NEW JERSEY
OHIO
WEST VIRGINIA
VIRGINIA
KENTUCKY
TENNESSEE
NORTH CAROLINA
SOUTH CAROLINA
GEORGIA
MISSISSIPPI
ALABAMA
LOUISIANA
FLORIDA
ATLANTIC OCEAN
GULF OF MEXICO
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DEPARTMENT OF THE INTERIOR

ANNUAL TRAVEL RECORDS FOR SERVICE AREAS OF REGION ONE

(The travel year ends September 30. Numbers preceding names refer to map on opposite page)

	1938	1939
National Parks		
1. Acadia, Maine	394,319	396,468
2. Shenandoah, Virginia	954,967	911,612
3. Mammoth Cave, Kentucky	120,692	116,516
4. Great Smoky Mountains, North Carolina - Tennessee	694,634	761,567
National Monuments		
5. Father Millet Cross, New York	*	*
6. Statue of Liberty, New York	248,999	428,081
7. Perry's Victory Memorial, Ohio	75,000	40,000
8. Mound City Group, Ohio	*	*
9. Fort McHenry, Maryland	283,822	258,403
10. George Washington Birthplace, Virginia	61,530	48,742
11. Meriwether Lewis, Tennessee	9,266	14,262
12. Ackia Battleground, Mississippi	*	*
13. Castle Pinckney, South Carolina	*	*
14. Ocmulgee, Georgia	36,302	38,521
15. Fort Pulaski, Georgia	45,170	40,995
16. Fort Marion, Florida	280,165	228,187
17. Fort Matanzas, Florida	20,726	21,370
18. Santa Rosa Island, Florida	*	*
19. Fort Jefferson, Florida	1,130	1,500
National Historical Parks		
20. Morristown, New Jersey	137,157	136,640
21. Colonial, Virginia	590,903	408,980
22. Abraham Lincoln, Kentucky	121,144	112,626
23. Chalmette, Louisiana	15,592	24,948
National Military Parks		
24. Gettysburg, Pennsylvania	1,554,234	608,125
25. Fredericksburg and Spotsylvania, Virginia	98,732	102,475
26. Petersburg, Virginia	150,486	192,246
27. Guilford Courthouse, North Carolina	33,920	45,544
28. Moores Creek, North Carolina	6,218	5,185
29. Kings Mountain, South Carolina	22,259	29,487
30. Chickamauga and Chattanooga, Georgia - Tennessee	310,940	357,451
31. Stones River, Tennessee	4,387	5,104
32. Fort Donelson, Tennessee	25,780	39,638
33. Shiloh, Tennessee	346,069	327,504
34. Vicksburg, Mississippi	317,120	290,227
35. Kennesaw Mountain, Georgia	4,314	4,648
National Battlefield Sites		
36. White Plains, New York	*	*
37. Fort Necessity, Pennsylvania	107,533	73,669
38. Antietam, Maryland	30,927	42,601
39. Cowpens, South Carolina	*	*
40. Brices Cross Roads, Mississippi	2,700	500
41. Tupelo, Mississippi	7,500	7,200
National Historic Sites		
42. Salem Maritime, Massachusetts	*	1,000
43. Federal Hall, New York	*	*
44. Philadelphia Customs House, Pennsylvania	*	*
45. Hopewell Village, Pennsylvania	*	*
National Memorials		
46. Lee Mansion, Virginia	553,122	436,163
47. Kill Devil Hill, North Carolina	80,911	70,071
48. Camp Blount Tablet, Tennessee	*	*
49. New Echota Marker, Georgia	6,085	6,090
National Parkways		
50. Blue Ridge, Tennessee - Virginia	*	*
51. Natchez Trace, Tennessee - Alabama - Mississippi	*	*
Totals	7,078,854	6,634,346
Totals for entire National Park System	16,233,688	15,454,367

* Records not available

THE REGIONAL REVIEW
ISSUED MONTHLY
BY THE
REGION ONE OFFICE
RICHMOND, VIRGINIA

Vol. III October 1939 No. 4

TBK

The Review acknowledges with appreciation the many friendly comments with which its readers received the illustrative sketches provided last month by Associate Engineer Tyler B. Kiener. It also seizes this occasion to reconvey editorially to Mr. Kiener the thanks which already have been expressed personally to him.

POOR ARTHUR

Devious and diverting are the editorial by-paths into which The Review is led each month in its pleasant duty of assembling the contributions of its unregimented staff of spare-time writers. The journalistic spur trails may lead to a photograph, to a map, or to some other device likely to illuminate the text. This month they converged on a footnote (see page 5) to Arthur the Rat.

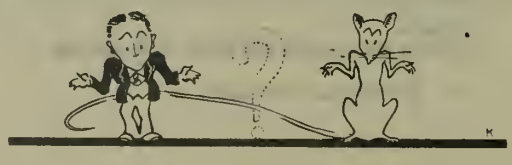
Joseph S. Hall, Columbia University fellow who provided the arrestingly excellent story of his survey of native speech in the Great Smoky Mountains, pointed out that the brief saga of rodential Arthur is one of the handiest phonetic yardsticks that can be used in measuring the speech of Americans. It tends to betray whether one grew up on a Bostonian "a" or a Cotton States "r," because it contains all essential sounds, just as the typist's sentence, "The quick brown fox jumps over the lazy dog," includes all letters of the alphabet.

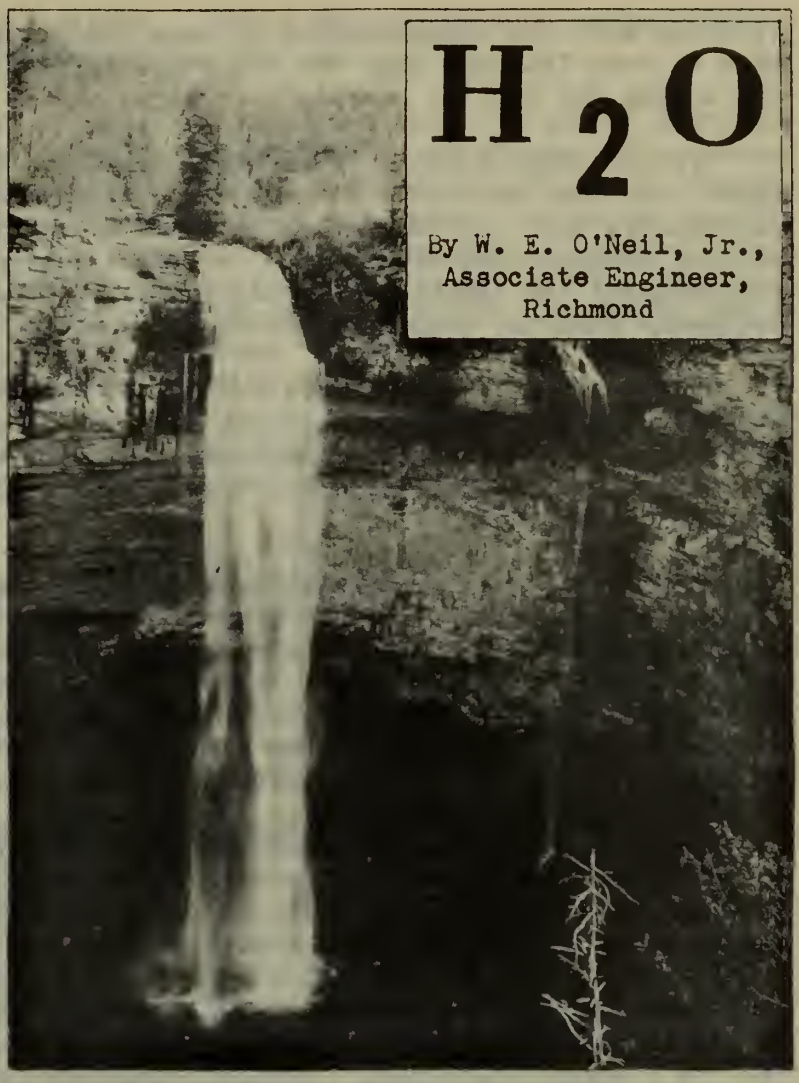
Phonologically intrigued, The Review telephoned to the juvenile departments of libraries and book stores; but no one knew the Arthurian legend. A kindly lady volunteer inquired of all members of her family and found none who had followed Arthur's career. Another, equally fine, when asked whether she knew the story of Arthur the Rat, smelled a mouse and replied chillily: "Certainly not, Sir! And I should deem it appropriate for you to discontinue any further queries of that character insofar as they may relate to me." A male acquaintance, questioned in the corridor and scenting a new one, drew into a corner and whispered "No, I haven't heard it. What is it?"

In editorial desperation, The Review wrote to Mr. Hall for a copy and it arrived by air mail. He explained: "The story is a reduced version of Grip the Rat, which is well known to students of American speech. . . There are many transcriptions of it. . . I do not know its origin or how it came to be used in connection with phonetic investigations."

A pall of gloom soon settled over The Review's small but earnestly milling staff. For the tale of indecisive Arthur is a stark tragedy in which probity, loyalty and firmness of purpose come to naught while gross injustice prevails. Because, when fearless Arthur refused to heed the hasty counsel of excited friends and abandon to the vagaries of fortune the revered hearthstone of his ancestors, an entire barn fell down on him.

The depressing episode leaves The Review doubly uncertain whether it should accept the moral and cancel its lease, or stand staunchly by its traditions against the threats of all whomsoever. --H.R.A.





H_2O

By W. E. O'Neil, Jr.,
Associate Engineer,
Richmond

A safe, adequately distributed water supply, upon which a park of any mentionable proportions must depend for its very existence, usually is taken for granted by the casual visitor. In defense of those to whom it is a major and sometimes extremely troublesome problem, the following brief outline of a few of the considerations involved in water supply development is offered with the hope either of enlightening the reader of or confusing him to the point of regarding engineers as members of a profession rather than as sly wielders of magical divining wands.

Since human beings are prone to certain gullibility --- and to travel about the country with scanty laboratory equipment --- they are likely to drink water issuing from almost any spigot or fountain without knowing at all whether it is good for man or beast. In order to reduce the mortality which would result from promiscuous water drinking, the various cities, counties, states, and even the federal government, assisted by interested societies, have passed laws making it the responsibility of the dispenser of water to see to it that it is safe, regardless of how it may taste. Making it look and taste good is where artistry is sometimes required.

Meteoric water is, of course, the source of all water whether it is found on the earth as surface water or as ground water. Chemically pure water is not to be found in nature, and that is just as well, for water which contains certain salts is more palatable and better suited to general use than that which has been distilled. Watery vapor condensed in the air as rain or snow absorbs impurities from the atmosphere. Gases normally present in the air, such as nitrogen, oxygen and carbon dioxide, also are absorbed, while ammonia, sulphuric acid and nitrous and nitric acids likewise are found. Rain water is deficient in minerals, however, and it therefore is "soft." Rain or snow takes up germ life

from the air, the concentration of such organisms varying with the duration of rain fall and with the altitude. (The higher concentrations occur during the earlier periods of a storm and at the lower altitudes.)

The history of water from the time it is precipitated until it finds its way back into the air is marked by the absorption of various substances, some carried in solution and others in suspension. As a result of chemical reactions some of these ingredients subsequently are precipitated or eliminated. Unfortunately, some of the changes are undesirable from the standpoint of the prospective consumer.

When meteoric water comes in contact with the surface of the earth it absorbs contamination, pollution and even infection, and as it passes through the soil or rock formations it absorbs minerals. It thus is evident that the course of its travel has a good deal to do with the quality of any water.

The sources of water are numerous. They are divided into the two general classifications of surface and ground waters. For convenience surface waters may be considered under the headings of rain, streams, natural lakes, and artificial lakes, all of which present problems of collection and treatment peculiar to themselves. Ground water may be divided into the four categories of springs, shallow wells, deep and artesian wells, and water from horizontal galleries.

Generally speaking, surface waters,in addition to being more liable to pollution, are subject to changes of character as a result of climatic disturbances, and their satisfactory treatment frequently requires closer surveillance than do ground waters. Ground water obtained from properly protected and developed springs or wells, with the exception of those fed from cavernous formations, are generally more constant in temperature and more stable in character. For reasons outlined above, as well as others which will not be discussed here, it is nearly always desirable in developing a small water supply to exhaust first the possibility of obtaining a suitable ground water source before resorting to the treatment of surface water.

It is not true that all surface waters present serious complications in their treatment for domestic use, or that all ground waters may be easily rendered satisfactory. It is true, however, that ground waters obtained from a suitable horizon and which have been properly developed are less subject to physical or chemical change and therefore may be more safely used for a domestic supply under lay supervision.

Such great strides have been made in the treatment of water that the feasibility of installing adequate equipment is too frequently taken for granted in park work. The difficulties encountered in attempting to treat water for park use are a result of the small scale of the operation and it is the writer's recommendation that unless it can be treated by mere slow sand filtration, or by sterilization,or by a combination of the two, the development should be abandoned as far as its dependence

upon a safe supply is concerned. This seemingly drastic recommendation has for its foundation the following reasons:

Where the treatment of water is dependent upon the use of chemicals and accurate rate control, proper operation is contingent on constant observation and occasional alterations in the chemical dosage to compensate for changes in the character of the raw water. It may be readily seen that as the size of the plant is reduced the more sensitive it becomes to small alterations in chemical dosage and the greater the skill required by the operator to produce the desired result. It should not be necessary to point out the unsoundness of investing heavily in water treatment equipment unless the benefits thereof are to be derived. It therefore follows that where water is to be treated by one of the more complicated methods the constant expense of a skilled operator must be considered a prerequisite to the desired results.

The question of a safe source of supply is only one of the many vexatious water problems which must be solved and, for the most part, buried under the ground before the take-it-for-granted park visitor can find it possible to perform the simple act of taking a drink of water with impunity. If this brief discussion achieves no purpose other than to impress its readers with the advisability of not only consulting competent engineers and geologists when necessary, but also of following their recommendations, it may have served a useful end.

Boulder Adapted for Drinking Fountain,
Great Smoky Mountains National Park

PRESERVATION OF THE MAMMOTH CAVE MUMMY

By Ned J. Burns,
Chief, Museum Division,
Washington

The desiccated body of an Indian was discovered in Mammoth Cave National Park, Kentucky,about four years ago on a ledge under a large rock which, in falling, had caused his death in pre-Columbian times. This find aroused considerable scientific, as well as popular interest, and shortly thereafter the two-ton rock was raised to afford a better opportunity to examine the body. Since it was not considered feasible to leave this unusual specimen on the ledge, the body was removed to the cave floor immediately below and placed in a glass display case to protect it from handling by visitors.

About two months after the change was made it was noted that mold was growing rapidly over the body, which would soon deteriorate unless prompt steps were taken to prevent further inroads. The Museum Division was called in at this point and we made an investigation to determine the cause and supply a remedy. It was apparent at once that the immediate cause of trouble was a noticeable rise in temperature due to the presence of tubular lamps installed inside the case as part of the original equipment of the dry goods display, as well as the fact that the case was far from air-tight. The rise in temperature also increased the moisture content of the body by the process of bringing in new moisture-laden air every time the lights were turned off and the air contracted within the case. These increases in temperature and moisture content had evidently upset the conditions existing in the centuries during which the body remained unchanged, and had stimulated mold growth.

We made an effort to discover the reason why this body had been preserved, when it is well known that animal and vegetable matter left in the cave for even short periods is soon attacked by mold in the prevailing humidity of 86 per cent and almost constant year round temperature of 54 degrees Fahrenheit. Wood used for steps and railings becomes unsafe within a year or two unless treated with creosote. We noted that bark sandals and other material contemporary with this mummy have been dug out of the cave sand in a good state of preservation, due to the presence of sodium nitrate or saltpeter, which is abundant and has been leached from the cave sands in paying quantities, notably for manufacturing gunpowder during the War of 1812. A chemical analysis of the body tissues of the mummy and the sand bed on which it had rested disclosed the presence of sodium nitrate, selenium, and a slight trace of arsenic. It is also noteworthy that the mummy's condition was peculiar in that instead of being dry and hard, as desiccated bodies found in very dry caves usually are, the flesh was slightly pliable like wet leather. A study of the evidence led me to believe that preservation was effected in the following manner.

After death the body began to decay and the (Continued on page 34)

LIVING MUSEUMS

of Norway and Sweden

By M. D. Jones,
Assistant Engineer,
Richmond

Sweden and Norway have an old civilization developed during many centuries uninterrupted by historical catastrophe. Those northern countries have never been subdued by foreign races throughout the last 2,000 years, and although their history records terrible and bloody wars, none has been carried deeply into their territories. Their civilization has been spared pillage and destruction and much has been preserved of the early environment and customs. It is through preservation of this heritage that future generations may possess treasures of incalculable historical interest in the form of living museums where the observer may go back for a day and live the life of his ancestors. It is not by mere accident, therefore, that archeology, as well as ethnographical research, has flourished so richly within the boundaries of the northern countries.

Old Dwelling (above) and an Ancient Viking Church Transplanted in the Folkemuseum

In many nations, much of the life of early inhabitants has been lost to history, and it has become impossible for new generations to obtain a picture of the progress and appreciate the true character of their people. The preservation of a few houses and their furnishings is good enough to convey an impression of a segment of the life of the past; but such preservation, if supplemented by that of the characteristic environment, affords at once a vivid and authentic picture of early days. Norway and Sweden have built living outdoor museums where the life of early ancestors is preserved for observation and study by the descendants.

Skansen, world famous open-air museum of Sweden, is situated in a large natural park. In it are homes and their dependent buildings which have been moved and reerected, in their authentically reconstituted surroundings, to demonstrate the customs and habits of life in the Sweden of yesterday. In the park also are wild and domestic animals indigenous to the northern countries. Skansen is a living museum for the various aspects of old folk life and there are dances, music and games, while old popular festivals are celebrated in conditions suitable to their period.

The entire park has been designed and developed not only to protect its charming landscapes, but also to be representative of the finest elements of the Swedish national character, and to pass on strong,pleasant impressions of the folklife of ancient rural Sweden before modern times transformed it. The entire scene is planned to conform with the transplantation of ancient houses which are most typical of changes in living conditions throughout the centuries and in different sections of the country. There are complete farm settings from various provinces which are representative of the old culture. The houses have period furnishings and are peopled by natives dressed contemporaneously and practicing home crafts of the time. The total impression gained by the visitor thus is not that Skansen is a park, but rather that it is a place where the calendar is turned backward so that he may see objects and people as they were in the fifteenth and sixteenth centuries. In brief, the park is not merely a repository for dead museum pieces; on the contrary, it is an area where complete units of the life of the past are reassembled so that they may breathe again.

The bygone life of Lapps, Finns, Swedes, Norwegians and Danes is preserved through families who live in the buildings, cook their food and follow their routine tasks in the manner of long ago. An interesting setting is a dairy farm called "Summerset," the home of people who lived on the products of herds of cattle and sheep in the forests of middle and northern Sweden. The building was used as a summer dwelling for those who cared for the flocks, and house and outbuildings are of a primitive form favored by the common class in the Viking age, and probably are of the type used throughout northern Europe where cattle grazing was the principal occupation. The interior of a cottage of southeastern Sweden shows the elaborate carving of houses constructed before the sixteenth century. Although the building is of logs, the interior decorations are intricate.

The Norwegian Folkemuseum, of Oslo, while less extensive than Skansen, safeguards many treasures of great historical interest, such as Viking boats recently recovered from the depths of the Skagerrak, and an ancient Viking church bearing both its old emblem and the Christian cross of a later date. Farm houses and their interior carvings are not as elaborate in Norway as in Sweden, but the settings are no less realistic. Essential features of all the periods are shown.

What makes Skansen and the Folkemuseum outstanding is the fact that the transplantations have been carried out with a close regard for the

preservation of environmental features, even to the details of fence enclosures, walks and roads. There is nothing artificial to detract interest or to give a feeling of reconstitution, because each site is selected to correspond exactly with that where the building or farm was situated originally. Altogether, the visitor feels that he is traveling through the open country and visiting the Scandinavian Peninsula in the days of the Vikings or in the fifteenth and sixteenth centuries.

Farm Taken from Älvros, in North Sweden, and Reconstituted in Skansen Park

BLUE RIDGE PARKWAY TO BE CLOSED FOR WINTER

Completed sections of the Blue Ridge Parkway, in Virginia and North Carolina, will be closed to through traffic beginning November 15 as a result of the decision of officials that present travel does not warrant the expense of removing snow and sanding icy pavements. The route will not be barred when the weather is favorable, however, and travel will be permitted at the visitor's risk. The date of reopening has been set tentatively for March 15.

Resumption of travel next spring, it is expected, will find a continuous link of 140 miles ready for use. The unbroken strip will begin at Bent Mountain Post Office, about 17 miles south of Roanoke, Virginia, and extend to Deep Gap, near Boone, North Carolina. It is believed that wayside picnic and camping areas at Smart View, Rocky Knob, Cumberland Knob and the Bluffs also will be in readiness for the new season.

'LET US CHERISH THE DOMAIN'

"Perhaps in the soul-satisfying beauties of our national parks and other sacred regions we shall find that we can regain something of that poise of outlook and courage in action which contact with unspoiled Nature may confer on human beings, and so ensure a continuance of our civilization on the lands which were so lately conquered by our ancestors.

"Let us cherish the domain we have received from the hands of Nature, and in using it for our collective enjoyment manage it wisely and damage it as little as possible. Let us study the pages of its story. Let us sense its romance. And finally, let us receive its benediction. --- Harlean James, Romance of the National Parks.

RECREATIONAL DEMONSTRATION AREAS

SUBSTANTIAL GAINS RECORDED IN ORGANIZED CAMP USE

Interesting facts and figures are found in a survey of the recently concluded 1939 summer camping season on Recreational Demonstration Areas. That these specially designed centers are beginning to bear good fruit is indicated by the steady gain in the number of children who are taking advantage of the camping and other facilities provided on the 22 areas of Region One.

There were 27 camps leased on a seasonal basis in 1938 and 104,323 camper days (staff and helpers not included) were reported. During the last season 36 camps were under seasonal lease and they recorded a total of 144,571 camper days, an increase of approximately 38 per cent. This gain is accounted for in part by an increased number of camps, but the fact that 62 separate organizations participated in the program, 22 of which were newcomers on the areas, probably represented the greater portion of the increase. It is interesting to note also that 11 organizations initiated their camping programs for the first time last summer.

The record altogether is encouraging, although there still is room for improvement. If the 36 camps had been filled to capacity for the ten-week season, there would have been a total of 226,050 camper days. In other words, a 56 per cent increase is a possible goal for 1940.

Outstanding seasonal use records include:

Area	Camps	Camp Days (including staff and help)
Chopawamsic, Virginia	5	30,018
Laurel Hill, Pennsylvania	3	15,467
Catoctin, Maryland	3	15,465
Otter Creek, Kentucky	2	14,431
Bear Brook, New Hampshire	2	13,379
Crabtree Creek, North Carolina	3	12,647
Swift Creek, Virginia	3	10,854
Raccoon Creek, Pennsylvania	2	10,014
Pine Mountain, Georgia	1	9,128

Of the 36 camps in operation, there were 6 occupied by boys, 8 by girls, 15 by coeducational groups and 7 by family groups. Local camp advisory committees and other public spirited organizations in the several communities were responsible for much of the encouraging growth in the camping programs. They were instrumental, with assistance of representatives of the Service, in promoting and organizing seven community camping groups. Through their efforts, several agencies which were unable to operate a camp alone were brought into a cooperative association and through their combined efforts it was possible to carry out a camping program for the less fortunate children of their communities.

Increased attendance during the summer probably is responsible for the large increase in short-term use of camp facilities. For the calendar year 1938, a total of 30,813 camper days of that character was re-

ported for the several areas. But for the first nine months of the current year there already has been recorded 38,700 camper days, or an increase of about 25 per cent above the entire previous year.

A great opportunity is afforded many community organizations to take advantage of camping facilities available for short-term use. A few camps were occupied nearly to capacity and many others had a reasonable amount of use, but there still were a few scattered areas and communities which recorded almost no attendance in the off season. The short-term occupancy reported was not sectional in character, but was distributed fairly evenly, both north and south. That would appear to gainsay the old story that the people of the south do not camp in the fall, winter, and spring. As a matter of fact, the short-term use figures are slightly larger for the southern portion of the Region than they are for the north. The trend should continue to increase, because the south has the advantage of a longer fall and spring, the best camping seasons of the year. --- Stanley M. Hawkins.

PEOPLE

LEMUEL M. GARRISON, Ranger at Yosemite National Park, California, has been appointed Superintendent of Hopewell Village National Historic Site, Pennsylvania. He is expected to enter on duty about December 1.

GERALD M. HYDE has been made Inspector in both Tennessee and Kentucky with headquarters at Nashville instead of Frankfort, and DONALD C. HAZLETT is Assistant Inspector for the same territory. The changes in inspectional assignments followed the resignation of C. G. MACKINTOSH, formerly Inspector in Tennessee, who has entered private business.

ALLEN T. EDMUNDS, State Supervisor for the Recreation Study, also has been stationed in Nashville. His territory now embraces Ohio, Kentucky, Tennessee, Mississippi and Louisiana.

CARROLL L. WOOD, JR., formerly State Supervisor in Louisiana, Mississippi and Alabama, has entered on duty in the Region One Office as Associate Park Planner.

RALSTON B. LATTIMORE, Assistant Research Technician formerly stationed at Fort Pulaski National Monument, Georgia, has been transferred to the Regional Office.

MAJOR JOSEPH MILLS HANSON, Assistant Research Technician who was assigned to the Regional Office, has been transferred to Petersburg National Military Park, Virginia.

BERNARD L. DOUGLAS, Auditor, has been transferred from Region One to the Region Four (San Francisco) headquarters, and PAUL H. GALLAGHER and FRANK J. KASPAR, Auditors in Region Two (Omaha), have entered on duty in the Richmond Office.

SHERMAN H. BULLIS has been appointed Project Superintendent of the Virginia Waysides.

CLARENCE L. JOHNSON has resigned as Senior Foreman Historian, assigned to Gulf State Park and Fort Morgan, Alabama, to become a member of the faculty of Alabama State Teachers College, Florence.

WASHINGTONIANA

At the top is a view of the Memorial Mansion erected in 1931 on the site of the original home at George Washington Birthplace National Monument, Virginia. Below it is a recent photograph of one of the bedrooms in the restored Ford Mansion at Morristown National Historical Park, New Jersey. From December 1779 to June 1780, the building was the official headquarters of the Continental Army and the home of General and Mrs. Washington.

PUBLICATIONS AND REPORTS

SERVICE PREDATOR CONTROL POLICY TRACED HISTORICALLY

"Predator management has been greatly influenced by superficial observation, personal bias, exigencies of the occasion, and group pressures," writes Victor H. Cahalane, Acting Chief of the Service's Wildlife Division, as he takes a long view of the situation in the United States in "The Evolution of Predator Control Policy in the National Parks" (The Journal of Wildlife Management, Vol. 3, No. 3, July, 1939, pp. 229-237). Accordingly, he points out, the policy of protecting virtually all predatory animals in the parks has resulted "from decades of experience".

Mr. Cahalane traces the gradual crystallization, through many stages of experimental and partial safeguards, of a governing policy of near-inclusive protection. He draws upon the nineteenth century records of the great western parks, particularly Yellowstone, where "the early superintendents exercised sporadic and haphazard control of wolves, cougars, and other carnivores". The slow but steady progress of a scientific attitude then is reviewed. Summarizing, the writer finds:

"It is evident that the national park predator policy in its various stages of development over the past 67 years has, on the whole, reflected the most advanced thought on the subject. Changes have been necessitated by special legal or natural limitations, and effected also by public sentiment and facts brought to light by scientific inquiry. Unfortunately the rapid recovery of hoofed mammals following near-extermination early in the twentieth century was but imperfectly perceived and predators were persecuted in the parks for at least a decade after they had become vitally necessary to maintenance of a balance. Our present problems of over-grazed ranges are in considerable measure due to this lag in human perception of cause and effect. A forecast of future trends is brightened by the knowledge that many past difficulties can be avoided by adherence to the policy of basing protection entirely on scientific investigation and ascertained facts."

GIRL ESSAYIST WINS KINGS MOUNTAIN AWARD

What is the Value of National Military Parks?, by Myrtis Dyches, of the Episcopal Orphans Home of York, South Carolina, has won first prize in a competition sponsored by the Kings Mountain Chapter of the Daughters of the American Revolution.

"The Park concept," explains Miss Dyches, "provides a new form of land use, humanly satisfying, economically justifiable, and with far-reaching social implications. Inherent in it is a new recognition of human values and a more intelligent method of commercial exploitation. As such it is a progressive step in land utilization and must take its place along with other great land-use techniques such as forestry, agri-

culture and mining. While it has been given considerable impetus in this country, it is still in its infancy. When it has been accorded proper recognition, the National Park system will comprise fewer lands than those devoted to forestry and agriculture, but it will include those areas and structures which cannot be adequately preserved and properly used under any other category of land management.

"When we speak of use, it does not necessarily mean development. One of the most important objectives of the park system is the preservation of large tracts of roadless wilderness, as a character and stamina building resource for all time. It is not luxury with which we are dealing, but National thrift. . . we must classify our lands and resources according to their greatest possible contribution to human welfare, which means to classify them according to their best use. In such classification, we must provide for the conservation and use of those resources that are primarily of inspirational character. Some lands are best suited for agriculture, others for mining, grazing, forestry, wild life refuges, and so on. But the Nationally important inspirational or recreational resources cannot be provided for under any of these; they will properly be conserved and will render their maximum use only when given Park status. A thrifty Nation will not overlook the conservation of such resources."

MATERIA APPALACHIANA

Through the courtesy of Myron H. Avery, Chairman of the Appalachian Trail Conference and President of the Potomac Appalachian Trail Club, The Review has received a copy of a recent letter written to the editor of Smoky Mountains Handbook concerning additions to the literature of the Southern Appalachians.

"You perhaps know," wrote Mr. Avery, "that there has been a supplement to the Southern Appalachian Guide. . . Whatever its defects, th e Southern Guide is the only available guide book to the Appalachian Trail /in the Great Smokies/. It would be of great help to the Conference if there might be included a note on these publications, setting forth that they are obtained from the Conference at 901 Union Trust Building, Washington. . . Worth including in the bibliography is the Conference publication, "The Guyot Manuscript". . .

"There are three other items in which I participated and perhaps should be hesitant in referring to. One, however, would seem to be of real value as it is a bibliography of the entire area. It is A Bibliography for the Great Smokies by Robert L. Mason and Myron H. Avery, Appalachia (journal of Appalachian Mountain Club, 5 Joy Street, Boston, $.50), June 1931, vol. 18, no. 3, pp. 271-277; Supplement in Appalachia, December 1936, vol. 21, no. 2, pp.209-210. Two other items are Arnold Guyot's Explorations in the Great Smokies by Paul M. Fink and Myron H. Avery, Appalachia, December 1936, vol. 21, no. 2, pp. 253-261; and "The Nomenclature of the Great Smoky Mountains" by Paul M. Fink and Myron H. Avery, Publications of the East Tennessee Historical Association, 1937, no. 9, pp. 53-64."

NOTED LICHEN SPECIALIST VISITS GREAT SMOKIES

Approximately 200 species of lichens were collected in Great Smoky Mountains National Park this fall by Dr. Gunnar Degelius, of the University of Upsala, Sweden, a world authority in the field. After determinations have been made he will supply the park with a list of the collected materials.

FIVE DAYS ON HORSEBACK IN THE SHENANDOAH

Commendation for the work accomplished by the Service in Shenandoah National Park, Virginia, with emphasis on the development of horse trails, is contained in a letter received by Secretary Ickes from Mahlon N. Haines, of York, Pennsylvania.

"It is my desire to express my appreciation of what you have done and are doing to make Shenandoah National Park, and the Appalachian Trail in particular, so fine," wrote Mr. Haines.

"Dr. Herbert H. Beck, who is a scientist at Franklin and Marshall College, and I recently rode over the Trail on Colorado burros and a horse. It took us five days. It is a revelation to see the wonderful grading and splendid trails. Ninety per cent of them are as good as the bridle paths in Central Park, New York, and Rock Creek Park, Washington. It is just too bad that there are not thousands of horsemen of America riding over these scenic trails. I have been to Switzerland, Northern Africa, Palestine, and ten times across the continent; just last winter I was to Guatemala and I have not known more thrills or enjoyment than the ride we had through Shenandoah National Park."

BATTLE OF KINGS MOUNTAIN COMMEMORATED

Observance of the 159th anniversary of the battle of Kings Mountain, South Carolina, was carried out last month at special exercises held in the national military park there. Dr. Rion McKissick, President of the University of South Carolina, gave the principal address, "The Spirit of the Kings Mountain Men." The program, which was sponsored by the Daughters of the American Revolution, was held in the partly developed amphitheater of the park.

VIRGINIA CIVIL WAR BATTLEFIELD HISTORIANS HEAR WHITE

Members of the historical staff of the Service's Civil War areas in Virginia held their first monthly meeting of the season at Petersburg National Military Park, with J. Stuart White, Publicity Director of the Virginia State Conservation Commission, as guest speaker. Other meetings will be held throughout the season at the various battlefields.

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(Continued from page 22)
fluids were absorbed by the sand bed into which it was pressed. This excess moisture dissolved out the sodium nitrate present and when the moisture content of the sand bed exceeded that of the body the fluids were reabsorbed, bringing up into the tissues this excellent preservative. This process continued until enough sodium nitrate had been infiltrated to arrest further decay; and under the cave conditions, which never changed to any perceptible degree, the body had remained preserved until discovered. Obviously it was impossible to restore these delicately balanced conditions; so after a careful study I decided upon the following method of preservation, which was carried out.

First the noticeable mold growth was cleaned away with a soft brush and later other objectionable spots were removed with acetone, ammonia, saponin, and other solvents as individual local areas indicated. A large wooden box with an air-tight cover was built, having a wire mesh shelf set up so that the mummy could be reached by a stream of warm dry air supplied by a blower improvised from electric fixtures and a vacuum with blower attachment. Ten pounds of dehydrated calcium chloride was placed in the box and removed several times during treatment as its moisture content rose sufficiently to warrant replacement. Careful watch was kept to be sure no damage resulted in the body from the drying process, and none was noted. The body was then carefully impregnated with thymol dissolved in alcohol, and after all alcohol was evaporated the specimen was installed in a specially constructed, waterproof and rustproof case fitted with gaskets to insure a perfectly tight fit.

An unusual feature of this case is the specially designed chemical tray under the bottom, fitted with a trap door, which automatically closes a small opening into the case proper before it can be withdrawn. When the tray is placed in position it releases a spring which opens the valve into the case, permitting contact with the inside air. A supply of thymol and calcium chloride is kept in this tray both to poison and dehydrate the air surrounding the mummy. Since mold cannot grow without moisture and a good fungicide is also present --- a double safeguard against a recurrence of trouble --- it is possible to exhibit this interesting specimen in the cave as near as practicable to the site where it was originally found, in spite of the adverse conditions of high humidity which existed there.

Periodic inspections during the past three years have not revealed any noticeable change in the condition of the body. It is therefore safe to assume no further difficulty will be encountered so long as the case remains intact and the chemicals are periodically renewed. (From The Museum News, Vol. XVII, No. 9, November 1, p.8)

THE CONTRIBUTORS

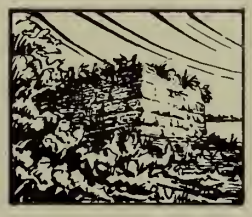
M. D. JONES, a native of New Jersey, entered the Service this year after a long record in the engineering field both in the United States and abroad. His work carried him to New Zealand for three years, and for a two-year period he was chief foreign consultant for the building industry to the Supreme Technical Council of Russia. He has traveled widely in Europe. He is an alumnus ('05) of Lehigh University.

JOSEPH S. HALL, born in Montana in 1906, is a graduate of Stanford University and has pursued advanced studies at Columbia University (M. A.), and in Paris at the École des Hautes Études, the Collège de France and the École des Langues Orientales. He is at present University Fellow in English at Columbia. He was a Service Student Technician in Great Smoky Mountains National Park in 1937.

WILLIAM E. O'NEIL, JR. has been attached to the Regional Office staff as Associate Engineer since 1936. Before that time he had served in various capacities in New York and in Maine. Born in New York 30 years ago, he graduated from Cornell in 1929.

R. C. ROBINSON (Vol. I, No. 4)

BOWLING C. YATES, JR., a native of Georgia and an alumnus ('27) of its state university, entered the Service in 1933. He served as Junior Historian at Chickamauga and Chattanooga National Military Park and at Kennesaw Mountain National Battlefield Park. He now is Superintendent of the latter area.

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